CLEAN VERSION OF PENDING CLAIMS

PARAMETER POPULATION OF CELLS OF A HIERARCHICAL SEMICONDUCTOR
STRUCTURE VIA FILE RELATION
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Claims 1-25, *as of May 31, 2001, (Date of Response to Final Office Action).*

1.   (Amended) A system for populating parameters of design cells defining the physical layout of a hierarchical semiconductor structure comprising:

a global file of global variables relating to layout of element blocks of the hierarchical semiconductor structure;

a plurality of local files, each local file containing parameters relating a plurality of local variables to the global variables; and,

a plurality of programmable design cells, each cell corresponding to a local file and having a set of parameters created by relating the corresponding local variables within a local file to appropriate global values from the global file such that changes of global variables in the global file may cause changes in the cells in accordance with parameters in the local files.

2.   (Amended) The computerized system of claim 1, wherein at least one local file comprises an inherit file which inherits parameters from the global file.

3.   The computerized system of claim 1, wherein each local file comprises an instance file.

4.   The computerized system of claim 1, further comprising a plurality of master files, each master file acting as an initial version of a corresponding local file.

5.   The computerized system of claim 1, further comprising a cleansheet file containing current design rules for the plurality of cells such that values for the global variables of the global file are derived therefrom.

6.   The computerized system of claim 5, further comprising an extract mechanism to update values for the global variables of the global file from the current design rules of the cleansheet file.

7.   The computerized system of claim 1, further comprising a mechanism to display values for the local variables of a local file, and permit a user to change one or more of the values.

8.   The computerized system of claim 1, further comprising an update mechanism to update the set of parameters of each cell by reading values for the global variables to which the local variables of the corresponding local file correspond.

9.   (Amended) A computer-readable medium having a computer program stored thereon to cause a suitably equipped computer to update a set of parameters of a design cell by relating local variables of a local file for the design cell to a global file of global variables relating to layout of element blocks of a hierarchical semiconductor structure such that changes of a global variable in the global file may cause changes in the cells in accordance with parameters in the local files.

10.   The computer-readable medium of claim 9, wherein each local file comprises an inherit file.

11.   The computer-readable medium of claim 9, wherein each local file comprises an instance file.

12.   The computer-readable medium of claim 9, further having a second computer program stored thereon to cause the suitably equipped computer to update values for the global variables of the global file from current design rules of a cleansheet file.

13.   The computer-readable medium of claim 9, further having a second computer program stored thereon to display values for the local variables of the local file, and permit a user to change one or more of the values.

14.   The computer-readable medium of claim 9, wherein the computer program is written in the SKILL computer language that is utilized in conjunction with Design Framework II software available from Cadence Design Systems, Inc.

15.   (Amended) A computer comprising:

a processor;

a computer-readable medium;

a global file of global variables stored on the medium at least some of the global variables relating to layout of element blocks of a hierarchical semiconductor structure;

a plurality of local files stored on the medium, each local file containing parameters relating a plurality of local variables to the global variables; and,

a computer program executed by the processor from the medium to automatically update a set of parameters for each of a plurality of programmable design cells, each cell having a corresponding local file, by reading, from the global file, values for the global variables to which the local variables of the local file correspond.

16.   The computer of claim 15, wherein each local file comprises an instance file.

17.   The computer of claim 15, wherein each local file comprises an inherit file.

18.   The computer of claim 15, further comprising a second computer program executed by the processor from the medium to display values for the local variables of a local file, and permit a user to change one or more of the values.

19.   The computer of claim 15, further comprising a plurality of master files stored on the medium, each master file acting as an initial version of a corresponding local file.

20.   The computer of claim 15, further comprising a cleansheet file stored on the medium and containing current design rules for the plurality of cells such that values for the global variables of the global file are derived therefrom.

21.   The computer of claim 20, further comprising a second computer program executed by the processor from the medium to update values for the global variables of the global file from the current design rules of the cleansheet file.

22.   (Amended) A computerized method comprising:

changing within a cleansheet file at least one of a plurality of design rules for defining the physical layout of a hierarchical semiconductor structure;

updating values for a plurality of global variables of a global file based on the design rules of the cleansheet file; and,

updating a set of parameters of a programmable design cell by relating corresponding local variables of a local file corresponding to the programmable design cell to corresponding global variables of the global file.

23.   The computerized method of claim 22, wherein each local file comprises an inherit file.

24.   The computerized method of claim 22, wherein each local file comprises an instance file.

25.   The computerized method of claim 22, wherein the computerized method is performed in conjunction with Design Framework II software available from Cadence Design Systems, Inc.